

MechSE WELLness

W01 Fundamental Water Quality

Intent: Limit presence of sediment and water-borne bacteria in water for human contact.

Water municipalities use an extensive water treatment system to maintain the integrity and safety of the water supplied for human consumption and handwashing. Two properties – total coliforms and turbidity – commonly serve as indicators for the effectiveness of these systems presence of other, more concerning contaminants. Coliform bacteria are naturally present in the environment, yet some species like E Coli cause disease. Turbidity, measure of cloudiness, reveals availability of food and shelter for microbes.

Impact: The quality of water people ingest has a direct bearing on their overall health and prevention of disease. Managing contaminants that serve as indicators can prepare the water for further treatment.

What are the requirements to earn this credit?

1. Water delivered to LUMEB for human consumption and handwashing must have a turbidity level less than 1.0 NTU.
2. Water delivered to LUMEB for human consumption and handwashing must contain 0 CFU / 100 mL total coliforms (including E. coli).
3. Monitor water quality at least once per year via report provided by local municipal (American Water) and submit report annually to WELL Online.

How is MechSE accomplishing these requirements?

Our Director of Facilities & Operations annually receives and reviews two water quality reports, one from American Water and another from campus Facilities & Services. Champaign-Urbana enjoys very high quality water that meets the requirements above. Our source of water is the local Mahomet Aquifer. This aquifer, ranging from 50 to 200 feet thick, supplies over 100,000,000 gallons of water per day to 15 counties, including Champaign County.

